To Feed the World, Change the System

At a conference in Quebec City, Agronomists from around the world discussed how to feed 9.1 billion people. Robert Hux, Ph.D., reports.

March 9—As of the approach of Spring planting season in the Northern Hemisphere, the combined impact of worldwide weather extremes, lack of food reserves, and consequences of failure to build up soil and water infrastructure, has put us in a breakdown process, headed toward global famine. The dynamics involved in this crisis, and what the solutions can be, were discussed by some 800 agriculture experts at a conference in Canada on Sept. 17-21, 2012, attended by representatives of 21st Century Science & Technology, who have provided EIR with this report.

The gathering, in Quebec City, with attendees from more than 25 nations, convened to address the topic of how to feed the 9.1 billion people expected to inhabit our planet by 2050. The event was the 5th World Congress of Agronomists and Agrologists, titled "Feed the World: Agronomists and Agrologists Front and Centre in Facing the Challenges of Local and Worldwide Food Production." This Congress is an initiative of the World Association of Agronomists (AMIA), which in 1996 held its first World Congress in Santiago, Chile, followed by events every four years since.

Over this same time period, world hunger has worsened, not improved. In 1996, there were an estimated 827 million people suffering from hunger, which number increased to 1.05 billion as of 2008, at the time of the acknowledged global food system crisis. Today, the situation is even worse. In absolute tonnage terms, the 2012 world harvests of wheat and corn were below the previous year; carryover stocks are plunging to record lows; meat animals are being culled; and food crops—especially corn—are being diverted in record amounts for biofuels. The process is now at the threshold of world famine, unless changed.

The Congress attendees represent the echelon of those scientists with agriculture expertise, who are important to reverse this deadly trend. Many of the speakers and participants have first-hand experience in aspects of what brought this about: green mythology, globalized markets, privatized patenting of crop genetics, undercutting of public research in agro-science, food cartelization, prevention of new water supplies and nuclear power, commodity speculation, financial bailouts, and killer-austerity. Various of these points were raised by speakers and in discussion.

However, the measure of policy discussion now, including for this conference of agro-specialists, is the question of *changing the system*.

There are three main planks of emergency action required:

- 1. Restore a nation-serving financial system, based on re-establishing the principle, and practices embedded in the 1933 Glass-Steagall Act in the United States. This means to separate commercial banking, from speculative, so-called investment banking. No more multi-trillion-dollar bailouts of private financial interests, and killer austerity, as is now seen in the Eurozone, among other places.
- 2. Extend credit, through sound national banking systems, for necessary economic activity of all kinds, from agro-industrial sectors, to local, province-level, and national government functions.
- 3. Undertake priority large-scale projects to vastly upgrade the productive platform for all nations. In North America, the continental-scale NAWAPA XXI (North American Water and Power Alliance) is on the agenda, and long overdue. These projects literally create new "natural" resources of water and land for agriculture, and all other purposes; and in the process, they employ millions of people in productive activity, and create conditions to improve the biosphere itself.

Understanding the nature and urgency of these economic emergency measures, requires facing the reality that we are in an end-phase of many decades of neo-British Empire policies. National economies have been

^{1.} Marcel Mazoyer, 5th World Congress of Agronomists and Agrologists, conference program, graph on p. 31.



The 2008 food crisis saw mass demonstrations by both farmers and eaters, but the current situation is getting even worse. Shown are Australian farmers in Canberra, protesting the takedown of the Australian Wheat Board, June 15, 2008.

undermined by forced globalization through the World Trade Organization (WTO), through "intellectual property rights," through cartels of mega-companies, and controlling financial networks. Under the rule of "the markets," food reserves are not permitted, with the excuse they would be "trade distorting." Add to this, the anti-technology, green ideology, and the problem becomes a threat to civilization itself.

This means facing the controlling interest—the British empire—and mobilizing for a revolutionary policy shift.

Several speakers and participants brought forward important information and passion for what could be done. For example, **Per Holten-Andersen**, the president of the Copenhagen Business School, brought up the debt crisis in Greece, Italy, and Spain. He said that our generation is grabbing the wealth and not investing in the future; that in the present system, we are not able to build infrastructure. He told this reporter that he has been involved in the fight for Glass-Steagall, and when briefed on NAWAPA, he replied, "That's what the U.S. needs!"

Lyda Michopoulou, an agronomist from Greece and president of the International Association of Students in Agriculture, addressed why young people would want become agronomists in a society which does not value their work. She noted that, contrary to popular opinion, the food crisis of 2008 proved that food is more valuable than money or gold.

Michel R. Saint-Pierre, the chair of the organizing committee for the conference, a former Deputy Minister of Quebec's Ministry of Agriculture, Fisheries and Oceans (MAPAQ), and an agronomist, said that expanding food supplies to support 9 billion people will require a mobilization like putting a man on the Moon!

OECD: Let the 'Markets' Prevail

In complete opposition to this outlook, there were speakers and participants who insisted that the world must remain within the confines of the dying monetarist system. One of these was **Ken**

Ash, Trade and Agriculture director of the Organization of Economic Cooperation and Development (OECD),

one of the opening plenary speakers. He argued using the sophism that hunger exists because of poverty, and shamelessly called for more of the same free-trade monetarism which has been the major cause of the crisis. He asserted that it is efficient (=unregulated) markets which determine farmers what produce (whether it be food, animal



World Congress of Agronomists & Agrologists Ken Ash

feed, or biofuels) by the self-evident rules of supply and demand; whether farmers receive a price that covers their costs of production; and whether sufficient quantities and types of foodstuffs are available, at affordable prices, to feed people. The security of individuals and nations under monetarism supposedly lies in having sufficient money to buy needed food and other goods, rather than the necessary organization of productive capabilities and resources to create them—a suicidal proposition in the presently dying financial system.

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National governments, he argued, have no right to subsidize domestic agricultural inputs (water, fertilizers, seed, fuel), or to establish tariff barriers to limit food imports and ensure that farmers receive a price for their produce which covers production costs. Although such an approach to "supply management" has always been a central aspect of the policies that nations have used in the past to overcome hunger and even become net food exporters, such "trade-distorting" measures must be eliminated, he said. Instead, governments should focus on improving the "efficiency" of supposedly fixed water and land resources (rather than creating new resources by diverting water from areas of excess to arid regions, or desalination); research and development of "high value crops" (opium perhaps?); "opening markets," allowing "market demand" to determine food prices (while doing nothing to prevent speculation) and providing farmers and consumers with "risk management tools."

Nations, Not 'Markets'

This imperial view was challenged the second day by Marcel Mazoyer, a prominent French agricultural engineer and consultant to the OECD and the UN Food and Agriculture Organization (FAO), who stated in a presentation on the causes, consequences, and outlook of world hunger that the global food crisis "was a totally predictable"



World Congress of Agronomists & Agrologists

Marcel Mazoyer

consequence of the policy of free trade. In remarks published in the Congress program,² he described the nature of the problem. Large farming operations, which move into poor countries where land is cheap and manpower underpaid, are able, with modern technology, to produce abundant food at low cost, for export at a low price. However, he noted that the simple fact that food is available does not provide a solution to the food crisis, but only makes it worse! Since 70% of the malnourished people in the world are themselves peasant farmers who are poorly equipped and not able to compete with the lower-priced food, they find themselves increasingly

impoverished and unable to replace their equipment, or to adequately feed themselves.

What is needed, Mazover said, are national governments which act to guarantee a fair price for agricultural producers, whether rich or poor, by creating common agricultural markets protected from cheap food imports through variable tariffs. In addition, research and development programs need to be directed towards an improved system of agricultural production. Based upon this approach, he said, after the 1940s, we produced food faster than the rate of population growth, disproving the view of British East India Company's prophet of doom, Parson Thomas Malthus. He commented that the productivity of peasant farmers globally must be raised through increased access to modern farm machinery. Presently only 28 million tractors are in use worldwide and 450 million farms still depend upon animals for subsistence agriculture.

Marcel Groleau, the President of Quebec's Union of Agricultural Producers (UPA), at a workshop on "Agricultural Policies and the Ability to Produce," emphasized the importance for nations to control the production and prices of their agricultural products by establishing barriers to cheaper food imports, as exemplified by



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Marcel Groleau

Canada's policy of Supply Management. Groleau said, in an interview with 21st Century Science & Technology, that this policy has come under attack in recent years by the WTO, because of fears by those who want to keep the present system that other countries may adopt the same approach.

In comments reported in the Congress program,³ Michel Saint-Pierre (mentioned above) noted the ruinous effects on global food security of monoculture crops for export and the conversion of grain into fuel. "We are at a breaking point," he said. "It is a very disconcerting framework that has become a latent crisis which is not likely to solve itself." In 2050, if the trend continues, 1 billion people will not have enough food to eat. He pointed to the productivity gap between peasant

^{2.} Marc Gallichan, "What have we learned from the 2008 and 2011 food crises?" ibid., p. 30.

^{3.} Julie Mercer, "Agronomists and agrologists will require assistance," ibid., p. 36.

Double Food Production! Now, or in Fifty Years?

A word of caution is in order, on the formulation that the world must double food production in 50 years. This formulation was spun in the Summer of 2008, to thwart an international upsurge during the food crisis at the time, demanding a change in policy. There were many figures, agencies, and nations in Spring 2008 demanding immediate international collaboration to double world food supplies as soon as possible. They called for such measures as setting aside the WTO free-market system, and returning to national sovereignty over food and agriculture policies, including a return to food reserves and the goal of national food self-sufficiency.

For example, in Argentina in May, the Chamber of Deputies Agriculture Committee held a hearing, at which its chairman, Federal Deputy Alberto Cantero, called for his nation to double food production at the earliest time possible. He said that Argentina could produce enough food to feed 500 million people—its own 40 million population, plus 460 million more.

In the Pacific, six leading rice-producing nations—China, India, Pakistan, Thailand, Vietnam, and Myanmar—met in May, and announced their intention to revive an organization founded in 2002, but which never got off the ground, the Council on Rice Trade Cooperation, to confer on ways to dra-

matically increase rice output, to the benefit of all. Many African leaders also spoke out.

Internationally, the Schiller Institute, led by Helga Zepp-LaRouche, called on the UN Food and Agriculture Organization (FAO) Food Summit, June 3-5, 2008, in Rome, to initiate action to double food production as early as possible.

But this was all blocked at the Rome confab, where functionaries connected to London financial and commodities networks, issued statements about "doubling food production," but in 50 years! They used the FAO "High Level Conference on Food Security and the Challenges of Climate Change and Bio-Energy" as a platform to demand continuation of WTO free markets. On July 3, FAO Director-General Jacques Diouf, speaking in Brussels, repeated the time-frame of 50 years.

This formulation was forced through in numbers of ways. UN Secretary General Ban Ki-moon appointed a High Level Task Force on World Hunger, with the mantra of "50 years." In Fall 2008, the Bill and Melinda Gates Foundation funded the founding in Chicago of a global agriculture initiative, based at the Chicago World Affairs Council. In 2011, the Gates Foundation, Rockefeller Foundation, and others formed AGree, a world agency dedicated to destroy any attempted resumption of national-economy-serving measures, while stating, "AGree envisions a world in 2030 in which people everywhere have access to affordable food...."

-Marcia Merry Baker

farmers in Africa and modern farmers, which has gone from 10:1 ten years ago to 3,000:1 today.

FAO: More Food, 'But'...

The Independent Chairman of the Board for the FAO in Italy, **Luc Guyau**, gave the opening plenary keynote which appeared to counter the subsequent remarks by the OECD's Ken Ash. Guyau said that it is inconceivable that, while we have enough money to go to Mars, finance wars, and save the banks, we are not capable of eradicating famine. Feeding people, he said, should not be subject to the same rules of the market that apply to cell phones and minerals. He attacked the criminality of speculating with the world's food supply,

called for limits on food speculation, and said that the WTO must allow countries to maintain "minimum levels" of food production.

But, Guyau's remarks also indicated a tendency (unfortunately shared by many other Congress participants) to go along with the poisonous "limited growth" paradigm promoted by the OECD and the WTO. For example, instead of the various formulations of the goal as "70% more food over the next 30 years" (Guyau), or "50-70% more food and feed by 2050" (Ash), or "double agricultural production in 50 years" (Mazoyer), shouldn't we ask what can be done *immediately*, rather than in 50 years (see box)? The idea that all nations could achieve food self-sufficiency and diets comparable to those of

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Europe and North America, was rejected as "utopian" by a representative of the FAO, even at the point that those nations are rapidly losing the ability to feed themselves.

Obeisance to 'Limits to Growth'

One of the symptoms of the mental disorder which has prevented mankind from being able to feed itself, is the way the public, including scientists, go along subserviently with untruths, in particular, such false concepts as that of anthropogentic global warming. Yes, patterns of weather extremes and climate change occur, but because of solar and galactic cycles.⁴

The climate change hoax followed upon the Club of Rome's 1972 *Limits to Growth* report, which used a computer model developed by Dennis Meadows and Jay Forrester at MIT Business School purporting to prove that human population growth was leading to an inevitable collapse through depletion of limited resources. Therefore, Forrester said, in order to avoid the collapse, we had to stop growing and live in equilibrium with nature.

As Lyndon LaRouche has demonstrated,⁵ the fundamental fallacy of Meadows and Forrester's argument involved the attempt to model an actual human economy with nothing more than linear equations (systems analysis) and the Leontief model of input-output relations developed for national income accounting!

The entropic collapse forecast by Meadows and Forrester was the *intended consequence* of excluding from their "virtual reality" any representation of the nonlinear processes of creative development which occur in the real universe. The track record of the last 500 million years of life on Earth, as known to us today through the fossil record, demonstrates a creative principle driving the development of living organisms in the direction of increasing complexity, throughput of energy and matter, and capabilities to transform the world around them. The process is nonlinear in that, for example, there are periods of mass extinctions in which there are dramatic collapses in the number of distinct genera of life, and yet the biosphere has always emerged with a new organization of living organisms that are

With the appearance of man several million years ago, a species emerged that, while part of the biosphere, was also distinct from it in its unique ability to consciously discover and use the creative principles of the universe to transform itself, in effect, into a more powerful "species." In this process, reflected in the history of revolutionary advances in mankind's scientific, technological and cultural capabilities, entirely new resources are created for man's use, and the only things that must "go extinct" are the relatively stupid ideas which previously dominated human society.

For the greenies to deny man the right to change the environment through, for example, building dams to protect life from destructive flood waters, is not only anti-human, but anti-nature. Not only does man's existence depend upon his ability to improve the productivity of the biosphere through such things as irrigated agriculture, but the biosphere depends upon mankind to conquer threats to its existence, as for example advancing deserts.⁷

At the Congress, it was the lack of clarity on such fundamental questions that allowed even well-intentioned individuals to be duped into going along with green falsehoods whose consequences are genocidal.

Some of the speakers who would say that we have to do things differently because of "climate change" were not prepared to abandon a rational approach to agriculture/food policy. For example, FAO representative Guyau challenged the idea that "climate change" is a valid excuse for the failure to develop adequate water resources. While it is necessary to save water, he said, we also need to create more fresh water, through such means as desalination. He also said, in response to a question from 21st Century Science & Technology, that large water-management systems are necessary, citing the example of the Aswan Dam in Egypt. The Dean of the Faculty of Agricultural and Environmental Sciences at McGill University, Chandra Madramootoo, noted that one of the major problems affecting agricultural production has been "climate variability" leading to floods and droughts, and that according to the OECD, there has been an underinvestment in water infrastruc-

more capable of further development.⁶

^{4.} Zbigniew Jaworowski, M.D., Ph.D., D.Sc., "The Sun, Not Man Still Rules Our Climate," 21st Century Science & Technology, Spring 2009, pp. 10-28, http://21stcenturysciencetech.com/Articles_2009/ Sun_Climate_sp09.pdf

^{5.} Marcel Mazoyer, 5th World Congress of Agronomists and Agrologists, conference program, graph on p. 31.

^{6.} LaRouchePAC Weekly Report, Jan. 26, 2012, "The Economics of Extinction," http://larouchepac.com/weekly/jan26.

^{7.} Robert Barwick of the Citizen's Electoral Council of Australia has exposed in a video that the "limits to growth" hoaxes originated with, and were promoted by, the neo-British Empire. See "'Ecosystems': A Genocidal Fraud," http://www.cecaust.com.au/ecosystemsfraud/.

ture in the last two decades.

But other speakers endorsed the greenie lies. The OECD's Ash, in remarks printed in the Congress program,8 rejected the idea of such large-scale water projects, which, he said, would upset the "fragile balance" between land and water resources that are "far from unlimited." He insisted that agricultural producers simply have to adapt to climate change. "We have already seen it and this will keep increasing. Production zones will be affected by heavy rains, while in other regions, it will be difficult to seed. It will be major. It will create uncertainty. Again, we must find water in the right place, in one region or another," he said. Asked whether there will be enough water remaining for agriculture, Ash replied: "It's ironic, but we will be asking farmers to produce more while reducing their water consumption. Farmers will be the victims of residential and commercial development."

"no-development-share-the-water-scarcity" These policies have genocidal consequences which could not be entirely covered up even by some of the speakers promoting them. This was the case with Henning Bjornlund, the Canada Research Chair in Water Policy and Management at the University of Lethbridge, Alberta, and an associate research professor at the University of South Australia, whose academic career has been focused on the role of water markets in reallocating water away from agriculture in drought-prone arid regions such as the Murray Darling Basin of Southeastern Australia and the South Saskatchewan River Basin of the Canadian Prairies. In his presentation on the role of water in agricultural production, Bjornlund admitted that farmers in the Murray Darling Basin were completely opposed to the Australian government policy of paying them to slash their water usage in favor of "protecting aquatic ecosystems." He noted that when farmers take land out of production because they have no water for irrigation, the abandoned fields are invaded by rats and other pests, which soon spread to neighboring fields.

In the South Saskatchewan River Basin, where this policy has led to a ban on any new water allocations since May 2005, he reported on the results of an extensive survey of 300 Alberta irrigators, showing very little support for Alberta's 2003 Water for Life policy of "sharing the water scarcity" through market-based in-

struments for water trading. He noted with frustration that his proposals for an amendment to water licenses to allow the sale of unused water have also met with widespread opposition, and not only from farmers.

The Biofuel Scam

One of the clearest indications of whether participants at the Congress could see through the "little green lies" and think about what is needed to actually feed the world's population, could be seen in their views on biofuels.

The easiest aspect for many participants to grasp was the inadvisability of increasing the production of ethanol from corn and other grains at a time of falling global production and end-of-year stocks. 21st Century Science & Technology correspondent Jean-Philippe Lebleu posed this question to the speakers in one workshop, stating that without a change from the present policy, we face another famine like 2007-08. The UPA's Groleau framed his response in terms of the markets, saying that bio-ethanol is illogical right now; the only reason farmers backed ethanol production a couple of years ago was that the price of corn was low, and they were looking for ways to sell more of it. Agronomist Juarez Morbini Lopes of the Brazilian Federal Council of Engineers and Agronomists said that in his opinion, food is sacred, and producing ethanol with corn or any cereal appropriate for human consumption is criminal. These responses elicited vigorous applause from the audience.

What was not as clear to most, was the idea that biofuels are inherently destructive because they lower the level of organization of human society, making more of the necessary economic activities dependent upon the very low energy-flux density of solar energy hitting the surface of the Earth, rather than using higher energy-flux-density sources such as nuclear power. Thus some conference participants, such as agronomist **Victor Villalobos** (see *Interview*, below) promoted the use of plants for biofuels that can grow under arid conditions, such as the inedible jatropha, as an opportunity for Mexican farmers who cannot make a living on their small plots of land, to make money producing biofuels.

What is needed instead, in this case, are policies that ensure that farmers receive a price for their crops which covers their costs of production (a parity price), as well as other policies such as the development of water resources.

David Bressler from the University of Alberta, again missing this fundamental point, described how

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^{8.} Yvon Laprade, "Public awareness is required, and quickly—Ken Ash," in 5th World Congress of Agronomists and Agrologists conference program, pp. 18-19.

soon it will not be ethanol which is produced from grains, but "second-generation biofuels" much closer chemically to petroleum-based fuels.

Change the Rules of the Game

In the Quebec City Declaration,⁹ the World Congress of Agronomists and Agrologists wrote that "The main goal of the Congress has been to analyze and discuss the key role of agronomists and agrologists in solving one of the greatest challenges in the history of humanity—to feed 9 billion people by 2050," which will necessitate "a new 'Green Revolution.'" But they want to do so under the constraints of environmentalism, claiming that "the fact is that humankind needs to produce more while also preserving resources."

Agronomists who were involved in transforming California into a world bread-basket, or those who saved the arable soils of the Palliser Triangle in the Canadian Prairies during the "dirty" 1930s, knew that you cannot let nature decide the future, but that you had to intervene and qualitatively improve the whole region.

You had to improve the rules of nature, just as today we need to change the rules of economics dictated by the WTO and similar international institutions representing British imperialism.

Once nations endorse Glass-Steagall and a system of national banking, enabling the emission of public credit to finance internal development, NAWAPA becomes the first step toward doubling food production. By bringing about 20% of the 800 million acre-feet of water in the Alaska-Yukon-British Columbia region. which now runs unused into the Arctic and Pacific oceans, down through the North American continent as far as the north of Mexico, we will transform a drying biosphere into a qualitatively improved continent. This project would revive every aspect of Canadian, American, and Mexican productive labor, from engineering to steel-making to nuclear power. It would replenish regions that are now fighting with their neighbors over water, refill underground aquifers, and make arid regions a thing of the past. This would then launch a new international dynamic for such massive water projects in South America, Africa, Eurasia, and Australia, thus making the doubling of food production a reality.

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NAWAPA XXI

A North American Water & Power Alliance For the 21st Century

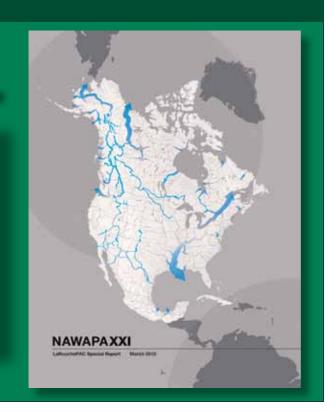
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^{9.} Quebec City Declaration: http://www.worldagro2012.com/wp-content/uploads/2012/10/Anglais_Declaration2012_QC.pdf